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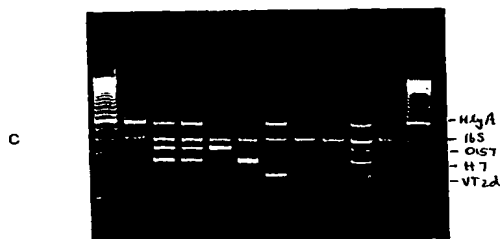
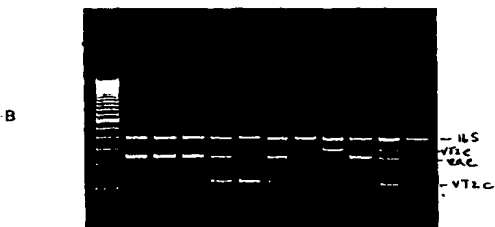
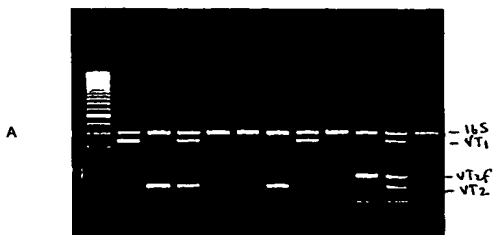
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(54) Title: **MAJOR VIRULENCE FACTOR DETECTION AND VEROCYTOTOXIN TYPE 2 SUBTYPE FROM CLINICAL *E. COLI* ISOLATES USING A ONE-STEP MULTIPLEX PCR**



(57) Abstract: A single kit comprising 3 multiplex PCR assays that can detect in *E. coli* the presence of the 8 virulence genes: *eaeA*, *EHEC-HlyA*, *Stx1* (VT1), *Stx2* (VT2), *Stx2c* (VT2c), *Stx2d* (VT2d), *Stx2e* (VT2e) and *Stx2f* (VT2f) is described. In addition, the kit can detect the two critical serotypes (O157 and H7) and identify the species (*Escherichia coli*) simultaneously using a one step reaction. Following evaluation in our hands, this PCR kit has been used to detect the above 11 components of disease-causing *E. coli* in a fast, accurate, reliable and specific fashion. These kits can be used on bacterial isolates and has the potential for use directly on foods and environmental samples.

WO 03/062464 A2



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